

MOBILE APPLICATIONS AND YOUTH OF INDIA: A REVIEW OF LITERATURE

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ABSTRACT

The Mobile Application (Apps) Usage has extensively grown worldwide with the increasing use of smart phones worldwide in recent years. The increasing use of smart phones and in turn extensive use of mobile apps has a great impact on society and economy in general. There is a wide research on users' behavior intention and usage of smart phones but no research has been found analyzing social, psychological, educational, economical and financial impact of usage of mobile apps by youth in India. This paper is a collection of literature review for the Mobile Applications and Youth in India.

KEY WORDS: Mobile Apps, Youth

INTRODUCTION

The world is moving towards virtual reality consuming digital media now and then. Mobile phones are the most powerful source used by the consumers. , The app time is universally a larger contributor than mobile web, where the refined user experience and functionality of apps has led to their dominance of mobile time. Whereas mobile apps were originally offered as productivity and information retrieval tools such as calendars, e-mail and weather information, the market has rapidly expanded due to users' demand and availability of developer tools. The most is utilities, followed by social networking, photo and video and games. Tools, communication, video players and edit, travel and local are the in the world. In the United States, mobile users spent the majority of their digital time – which varies greatly according to their – with mobile music apps.

LITERATURE REVIEW

Being connected too much everywhere by messenger services led people to feel fatigue and sometimes even avoiding using mobile communication at all (*Jaewook Shin, Mincheol Shin, CBSN, 2016*). Based on sample of 334 respondents, study investigated relationship between various user behaviour including messenger fatigues and mobile shunning behaviour. The findings have shown that the over exposure by mobile messenger services has led to mobile messenger fatigue which led to mobile shunning and avoiding usage of any application at all. study revealed, being constantly connected was a blessing in a disguise.

Mobile app market; one of the most growing online market for smartphones and tablets etc. (*Leszek Gracz, Handel Wewnętrzny, 2016*). The primary research was conducted to find role of mobile applications in the present-day marketing by companies. The key findings revealed that research companies were well aware of m-marketing and importance of the same as a new and interactive channel to communicate with audience. However, it was also revealed by study that there was scope for improvement and potential for further growth.

Many service providers have started delivering their applications to provide e-books to target consumers (*Jiming Hu and Yin Zhang, LIBRI, 2016*). There had been lack of factors which affected user loyalty towards e-book reading applications. The study employed expectation-confirmation model along with TAM. Survey data were collected from 390 respondents. The study revealed that perceived usefulness and satisfaction directly influenced continued intention.

Smartphone has become the most used devices in current times (*IonutAndone, Konrad Błaszkiwicz, Mark Eibes, Boris Trendafilov, Christian Montag, Alexander Markowetz, ISWC, 2016*). The study presented how gender and age affected use of smartphone. The study selected sample of 31 Thousand respondents. The study was continued for at least 28 days the demographic data by questionnaire. It was found that females use phone for longer period than males and younger participants used their phones longer and the primary purpose was entertainment and social interaction through their category applications.

With the availability of many service providers of products online, the Indian customers are getting more and more option and varied prices too (*Pankaj Yadav, IJRCIM, 2015*). Almost every company has developed its website and application to engage more and more users. The data was collected in form a questionnaire with close and open-ended questions in 5-point Likert scale. The findings showcased, that convenience, personal innovation and trust factor played positive role in influencing mobile users.

Now-a-days physical fitness depended on health apps on various platforms (*Jaehee Cho, H. Erin Lee, Sun Jin Kim, Dongjin Park, CBSN, 2015*). The study investigated how factors related to body image played vital role by aid of usefulness of health apps. The study based on TAM, tested relationship among various factors of body image. The results revealed that respondent's perceived usefulness of diet/fitness apps depended on evaluation of appearance and intention of continued usage.

The "P" of 4P's of marketing played important role in location-based applications (*William'F.'Humphrey,'Jr.,'Debra'A.'Laverie', IJMM, 2011*). With smartphone penetration and social media reach, the marketers have used this to promote the location placed applications. A model was proposed for those who received offer by Mobile Social Networks (MSN) versus to those who

didn't, and a pattern was expected. It was observed in study that quota-based promotion displayed stronger relationship with increased frequency compared to price-based promotion.

Service environment based on technology grown at an exponential rate (*Manuel Rivera Amy Gregory Liza Cobos,, JHTT, 2015*). The paper aimed to find consumer perception for adoption of mobile technology in hospitality segment. An online survey was conducted in study was analysed with path analysis. It was observed in study that usefulness, attitude and experience played a vital role in intention to use a mobile application.

The communication platform nowadays has enabled users to connect indirectly and take follow up as required at personal as well as professional level (*Alessandra Varotto, Luciano Gamberini, Anna Spagnolli, Francesco Martino, Isabella Giovannardi, CBSN, 2016*). The study was performed on experiment basis as 7-week trial. The study shown that user activities such as participation, inward and outward communication and reciprocity were affected by social feedback. At the same time study found that users not aware of the said effect, which showed discrepancy between observational and self-reported measures.

Smartphones are mobile phones with advanced features and more power which performed heavy tasks including gaming for generation Y (*Mr. Debpriyo Banerjee, Dr.Kallol Das, RJM, Romaninan Journal of Marketing, 36-48, 2015*). The paper explored influencing factors or motivational factors their implications on generation Y. Exploratory approach for research was used. The imaginative type of games influenced motivational reason of fantasy. The conclusion drawn was people who wanted to escape from real life played imaginative games.

Mobile marketing in India has generated revenue of 1.1 Trillion at the end of 2012 (*Ketaki Bhave, Varsha Jain, Subhadip Roy, IJMM, 2013*). Smartphones were being extensively in India by Generation Y. Since a majority of heavy users has been to the generation Y, it was important to study how brand interact through their applications to the users. The research has adopted a qualitative approach to understand consumer rights. The major determinant found out were hindrance caused by ads, screen size, personalisation, permission and incentives. The study provided relevant insights to control said determinants.

Indian telecom penetrated wireless subscribers by 65 % of population in 2013 (*Varsha Jain, Saumya Pant, AarzoDaswani, IJMM, 2011*). Mobile phone has become most convenient mode of communication. The study found fundamental issue with mobile marketing was limited screen size and tolerance of users.

Emerging countries has seen extensive growth of mobile usage (*Varsha^[SEP]Jain, Saumya^[SEP]Pant, IJMM, 2012*). It was observed that the Gen Y in India was of 50% population with age of less than 25

years. The study was to comprehend effective mobile marketing on generation Y. The parameter varied in all the generations. It was founded that generation Y had high spending power, believed in amusement, and had high aspirations and desires.

Mobile internet allowed users to download digitized content and services (*Shuiqing Yang, Yaobin Lu, Sumeet Gupta, Yuzhi Cao, IJHCI, 2012*). Structural equation modelling was used to analyse data collected. The study shown that adoption decision was context dependent. The context fully mediated effects of utilitarian values.

End user software designed to extend device's capabilities (*Linwan Wu, IJIMA, 2015*). Mobile platform used branded apps as an innovative marketing approach. Continued usage of apps led to success of branded apps. The study conducted online survey which discovered factors influenced customer's intention to continual usage. The study revealed and confirmed app engagement was influenced by social influence, brand identification and effort expectancy. The continued intention of usage was direct factor of performance expectancy.

Mental health patient started using smartphones for receiving treatment (*Ana Radovic, Pamela L. Vona, Antonella M. Santostefano, Samantha Ciaravino, Elizabeth Miller, Bradley D. Stein, CBSN, 2016*). Many adolescent and adults avoided seeking treatment for mental symptoms. The most common reason for which the apps used was to symptom relief followed by general mental health education.

Desktop systems were outnumbered by mobile apps in 2011 (*EvanthiaFaliagkaa, Maria Rigoub, Spiros Sirmakessisa, BIT, 2015*). The iPhone was supplied with inbuilt applications. The study confirmed the list of usability and documented the problems. It was found that gestural devices introduced lots of new challenges.

Use of mobile and wireless devices made conducting business more effective (*Fiona Fui-Hoon Nah, KengSiau, And Hong Sheng, CACM, 2005*). The study selected respondents of various departments of companies and understood value of mobile applications. The study highlighted concerns, issues and values from applications.

The mobile applications research and usage behaviour has become a new and emerging area of research (*Varsha Jain, Vijay Viswanathan, ISR, 2015*). The apps were used across all the categories like travel, politics, health and entertainment. It was observed that an individual used phone primarily for social networking and the preference was different each time. The applications with augmented reality have created enough impact on users.

The consumer packed goods industry has relied heavily on mobile applications and promotion in recent years, and have generated lots of revenue (*Dave Cameron, Chris Gregory, Daryl Battaglia,*

JAR, 2012). The study overserved that when the coupon was displayed digitally on smartphones, it became clutter free and motivated the user to purchase more.

The mobile revolution made people of both developed and developing countries shift to smartphone from ordinary cell phone (*Shun Han Rebekah Wong, RSR, 2011*). The study identified the preference of users about website or application. The study observed that, in both the cases significant users were present on both the platforms. It was found that initially a web services to be used followed by application development.

The increased international tourism has led to increased development of application in various categories (*Colin F. Mang, Linda A. Piper, Natalya R. Brown, IJTR, 2016*). The study explored smartphone utilisation by tourist in various countries. The study identified that the most common usage was photography, maps, transportation and hotel and restaurant with social networking too. It was also identified that younger group used phones more than older group. The important factor was access to open wi-fi access.

Jessica, (2003) in this study mainly focused on e-service quality dimensions by focusing on the focus groups and used the exploratory study. In this study it was found that e-service quality dimensions are very important for retaining customers to the system. According to this study the main dimensions of e-service quality are ease of use, structure, layout and appearance linkage. All these dimensions mainly consists reliability, efficiency, security, incentive and support. These are the dimensions that are required by the customers to be with the system.

Swaid & Wigand (2009) studied mainly two aspects. Firstly, to built a scale for the measurement of the e-service quality and secondly, to examine the effects of various e-service quality dimensions over the different kind of Loyalty, individually, by using the structural equation modeling and factor analysis. In this paper they have established reliability, responsiveness, personalization, assurance, and information quality and website usability as the dimensions of e-service quality. It is revealed in this study that assurance is the main factor that influences the price tolerance, reliability is having greatest influence on preference loyalty and responsiveness have considerable negative impact on complaining behavior. This paper has established reliability, responsiveness, personalization, assurance, and information quality and website usability as the dimensions of e-service quality. Responsiveness is defined as customer's perception of getting the help when needed by automatic or human factors. Personalization means person to person attention and variety of service that are customized to meet individual's needs and preferences. Assurance is termed as confidence and trust toward the website. Information quality is usefulness and quality of website content. Website usability is degree of user friendliness in using the website and ease of navigation. Service reliability

relates to reliability of the site (e.g. confirmation of emails, order tracking functions) and accuracy of service promises (accuracy of order).

Taoting, (2010) in his study mainly focused on investigating the impacts of three types of quality viz. information, system and service quality of banking app on perceived innovativeness, satisfaction and intention of continuing usage by applying the DeLone and McLean IS Success Model. In this study multidimensional structure of system and information quality was built to check their relationship with satisfaction.

Ojasalo (2010) in his paper defined the concepts of e-service quality and developed a model for e-service quality. The main purpose of this study was to find out the main establishing dimensions to measure the e-service quality by analyzing the literature. This study explained eight dimensions of e-service quality. These are Ease of use, Web site design and appearance, personalization, Information, Responsiveness, communication, Security and Reliability. According to this study any of the previous research has not explained the relation between e-service quality dimensions and quality perception, so this study attempted to develop a model that will combine both, the quality dimensions and disconfirmation paradigm. Ease of use means information access, ease of ordering, easy URL address, and well organized, understandable terms and conditions and contents. Web site design and appearance means attractiveness of graphics, colors, and images and pleasing to the eye. Personalization is based on the user's needs recognized from past purchase and information. Quality of information is termed as presentation and layout of realistic information and functions on a Web site. Responsiveness is quick feedback on requests and suggestion for improvements. Communication refers to accessibility of the website's user to communicate to the easy approach to website provider and availability of various communication methods to contact the support service through the website. Security is defined as security and privacy, freedom from danger, risk, or doubt during the service process. Lastly, reliability is referred fulfillment of promised services. It involves fast support service, accurate orders, updated content, keeping promises and availability of technical service.

Sharma & Malviya (2011) in her study tried to find out the important service quality dimensions of mobile banking in Indore, and the development of the measuring scale for service quality offered by M-banking. According to her 'Reliability and Responsiveness, Assurance and Security, Convenience, Efficiency, and Ease of Operation' are the main dimensions that has to be studied by all the managers and the researchers to find out the customers perception toward service quality of the M-banking. As these are the main dimensions according to her that are widely used by customers during evaluation of service delivery process. In this study mainly Cronbach's Alpha Test of

Reliability, Factor Analysis with Principle Component Analysis as an extraction method, Varimax as Rotation method with Kaiser Normalization is used. This study has elaborated the various dimensions for the measurement of service quality but fails in identifying the relative importance of these dimensions. This study explored five dimensions; these are 'Reliability and Responsiveness, Assurance and Security, Convenience, Efficiency, and Ease of Operation'. They defined Mobile Banking Responsiveness as getting the help when needed, Reliability as probability of satisfactory performance of services and the production of desired result. Assurance is defined as confidence and trust towards the mobile banking services and Security can be defined as the degree of safety and protection of customer's information. Assurance is outcome of Safety. Convenience in Banking is speed with universality. Efficiency is termed as simplicity of usage and minimum efforts. Easy to Operate is defined as degree of user friendliness.

Zera, Arganb, & Arganc, (2013) tried to develop the dimensions of mobile service quality and checked their effect on customer satisfaction. They established satisfaction, availability, perceived risk, ease to use, compatibility of device, and entertainment as six dimensions of mobile service quality and found that satisfaction, availability, perceived risk, ease to use, compatibility of device, and entertainment has positive impact on satisfaction, and ease to use is also an important dimension for satisfaction. Confirmatory factor analysis was performed to establish measurement model. The structural equation model (SEM) was used to analyze the relationships between the dimensions of mobile service quality and customer satisfaction. This study defined mainly six dimensions of mobile service quality. These are satisfaction, availability, perceived risk, ease to use, compatibility of device and entertainment. Satisfaction includes customer's satisfaction to mobile service, satisfied usage, enjoy usage, will recommend. Availability includes good download speed; quick response to data access, anytime and anywhere reach and remember preferences. Perceived risk is described as information is respected and safe; secure transactions, confidence of security. Ease to use is classified with clearly classified menu, availability of information needed, well designed contents. Compatibility is defined with appearance screen resolution and screen size. And the last dimension entertainment is defined with variety of music, high quality sound and high-quality video.

Lin H.F., (2013) in his study analysed low experience and high experienced group to evaluate m-banking service quality. Both the groups considered service quality or customer service as an important aspect for M-banking quality. This study proved that convenient, quick, reliable and personalized services can increase the trust among the customers toward banking service. Low experienced customers are reluctant toward m-banking because of probable loss of personal information, and due to non encryption of SMS. So to retain less experienced customers it is must

that banks should provide secure services, adopt protection policy, satisfaction guarantee to the customers, increase trust toward services, and provide personalized information and attention. High experienced customers expect a high level of responsiveness and feedback about their queries and concerns. So prompt customer services are must to retain all kind of customers.

Sagib & Zapanin this study mainly tried to explore perceived service quality dimensions and their effect on customer satisfaction and loyalty. It was found in this study that service quality is an important part of mobile banking system and with the help of factor analysis it was found that reliability and responsiveness, convenience of location, assurance and security and efficiency and easiness to operate are the main components of service quality of m-banking in Bangladesh. With the help of regression analysis, it was established that reliability and responsiveness, efficiency and convenience effect positively to the satisfaction and reliability and efficiency affect positively customer retention. This study found that mobile service quality affect customer satisfaction, and all the components of service quality (reliability, assurance, efficiency, easiness to operate, convenience) affect separately the satisfaction of the customers and moreover customer satisfaction is having positive impact on loyalty of customers.

Hossain & Hossain, (2015) presented their study in two parts, first part studied the effect of service quality of mobile banking on the customer satisfaction. Service quality mainly consists of reliability, responsiveness, assurance, empathy, and tangibility. And the second part, studied the relationship of customer loyalty with the cost of switching, trust and quality of services in mobile banking in Bangladesh. To test these relationships mainly correlation, multicorrelation analysis and the regression analysis was done. Moreover the Cronbach's Alfa test is also used for reliability check. In this study it was found that there is a significant relationship of reliability, responsiveness, assurance, empathy, and tangibility with the customer satisfaction. But only the reliability and the responsiveness is having the significant positive impact over customer loyalty and other factors as assurance, empathy and tangibility are not having significant positive impact on loyalty. Switching cost, trust and demographic conditions have positive impact on loyalty. Banks should pay more attention toward reducing the switching cost and to increase the trust among the customers to increase the loyalty. It was stated in this study that service quality affects customer satisfaction positively, but not having significant impact on loyalty.

Jun & Palacios, (2016) focused on finding the key dimensions of mobile banking service quality with the help of critical incidence method. In this study mainly 17 factors were analysed like 9 components of m-banking application quality, that are accuracy, ease of use, speed, content, aesthetics, diverse mobile application service features, security, and mobile convenience, and 8

components of m-banking customer service quality that are reliability, competence, responsiveness, courtesy, access, communication, understanding the customer, credibility, and continuous improvement. It was found in this study that among all these components accuracy, diverse mobile application service features, ease of use, mobile convenience, and continuous improvement, are the main factors that affect customer satisfaction.

Various researches have been studied to find out service quality dimensions and it is found that reliability, responsiveness, assurance, empathy, tangibility, ease of use, ease of operations, trust, design of the system, security, personalization and incentive can be considered as main dimensions of E-service quality. These are the dimensions almost found important by almost all the researchers. There are various models available to measure the service quality dimensions like E-S-QUAL and E-RecS-QUAL are the two models that mainly consist of all these dimensions of E-service quality.

Technical committee, RBI , (2014) report provides an insight of Mobile banking, the USSD channel, the SMS based channel, the Application based channel,. In this report the hurdles faced in adoption of mobile banking and issues generated in access to the USSD channel by banks were examined with reference to the financial excluded people in India. This committee also provided some recommendations regarding the solution of this problem, these are IVR access channel, multilingual Unstructured Supplementary Service Data (USSD) , STK(SIM Tool Kit) based common mobile banking app.etc. According to this report standardization should be there in user registration, user authentication and user interface process. To increase the financial inclusion with mobile banking alternate channels of mobile registration such as interpole ATM network across banks, BC/Agent network using biometric authentication can be facilitated to register the mobile number conveniently. Common application for all banks, bank employee workshops and customer education programmes must be conducted by the banks.

Islam, (2014) in his study focused on the challenges faced and security threats in the mobile banking and payment system. According to him, now a days each and every financial institution is using mobile banking and other financial services as a growth strategy tool, but at the same time this usage is posing as a security threat. This study is focused on the current scenario in the security system by analysing the available literature and educating the customers on the security threats in mobile banking and financial service industry. In this study the threats posed by mobile payments, operating systems, and network and transport system is studied. This study stated that organisation and mobile companies should work together to make efficient mobile system, mobile companies should work with operational and network companies to make reliable security system. System

should be regularly updated, and some SMS should be blocked that pose security threat by adopting these measures challenges can be minimised.

Aggarwal, (2014) in this study stated that in present scenario the role of the technology is increasing very fast and for the growth of an industry the adoption of the technology is must. Banking sector plays an important role for the growth of any economy, and the usage of technology in the banking sector is also increasing and the concept of mobile banking emerged. This study mainly focused on the importance of mobile banking in the era of the technology that will facilitate the growth of banking sector with high speed. This study stated the mobile banking provides certain benefits like speed, easy accessibility, security, less cost, universally accepted, increase in customer base and many more benefits that are required for the development and growth of any economy, so the concept of mobile banking is very important and gaining momentum in present scenario.

Nayak, Nath, & Goel, (2014) in this study stated that adoption of M-Banking in India is only 12 percent although there is a huge base of the internet user subscribers of 143.2 million. So, to increase the rate of adoption in India banks should take certain steps, awareness program on M-Banking should be executed through demo fairs, advertisements, pamphlets and campaigning etc. This study suggested that trust should be built among the consumers and the service providers for the security and privacy. Management's main focus should be on the development of useful systems, cost reduction and trust building among the customers as perceived ease of use and perceived usefulness are the main factors that affect the customer's adoption behaviour. Customers will use this technology if they feel it easy to use and understand. Moreover, cost reduction strategies should be implemented by the management to attract more customers as perceived cost is also one of the determining factors for the adoption of technology.

Mariotto & Verdier (2015) in this surveyed the issues of innovation and competition in internet and mobile banking. This study states that consumer's protection should be given priority over competition, and the banks of Finland are doing the same by establishing the payment system regulator in U.K.in 2013. This study said that regulators should design the system in such a way that consumer protection, privacy, security, terms to access consumer accounts and unification of security requirements can be established.

Fenua & Pau, (2015) found that android and IOS are the main platforms on which banks are establishing their apps. Moreover there are many more advanced features in mobile banking applications than their counterpart web based banking. According to this study this platform can be used to provide access to various another extended services to the customers due to its capabilities

of making possible of new advanced services and applications. So banks are investing a huge amount of funds in establishing mobile banking applications.

Sharma & Kaur, (2016) stated that the concept of M-Services is becoming prominent these days. Growing trends of investment in these services act as a promise to serve to the society. According to the Global Banking Report, M-banking is the speedily adopted and is the largest banking channel in terms of volume and value of transactions. This study is mainly focused on analyzing the adoption pattern of M-banking; and to study the progress of M-banking with various banks. It was found that the trends of Mobile banking are increasing. It was found in this study that Private Banks are playing a vital role in providing mobile-based banking services. There are many sources to spread mobile banking, but mobile banking applications are the mostly used mean of mobile banking as compare to SMS banking and website based mobile banking. It was found that M-banking is used mainly to pay bills, check statements, and check balance and mainly to transfer funds to one's own two accounts. In case of mobile banking, the major concern is of security issues. One report of Wagilant stated that most of the M-banking attempts are not able to generate fruitful impacts due to their failure in providing security. The transactions and talks are not in encrypted form, so security is the major concern and the biggest hindrance in providing customer satisfaction with these services.

A variety of researches have been conducted to examine the success of IS model at individual as well as organization level. Moreover, the D&M model was mainly used to analyse the interrelationship of constructs at both the individual and organization level. Many studies have found that D&M model is very successful in evaluating utilitarian mode of Information System. The updated D& M model is a useful framework to understand the key success dimensions and their existing interrelationships, but other researches should be done to measure the use of D&M model in hedonic IS and further steps need to be taken by researchers to formulate a complete comprehensive and informative measure of IS Success (Petter, DeLone, & McLean, 2008).

Petter, DeLone, & McLean, (2008) in this study done a literature review and analyzed 180 papers existed during 1992-2007. This study tried to establish a model that would be able to measure the success of Information System (IS). Initially they developed a model in 1992 and included only six variables viz- information quality, system quality, use, user satisfaction, individual impact and organizational impact to measure success of IS. But due to suggestions of many other researchers that model was updated and included new constructs like, system quality, intention to use and net benefits. Intention to use was replaced by use and organizational and individual impact was substituted by net benefits. According to this study this model can be considered as best model to

measure success factor of IS. Almost all the studies used D&M model both at individual and organization level and found that D&M model is best for utilitarian IS success measurement.

Halonen, Acton, Golden, & Conboy, (2009) tried to use the D&M (2003) model to find out the success of the virtual learning Environment (VLE). In this study mainly six dimensions were established to describe the environment, these are-system quality, service quality, information quality, use, user satisfaction and Net benefits. It was found that VLE is quite successful in accomplishing degree program. In this study measures used by (Holsapple & Lee-Post, 2006), (Wang, Wang, & Shee, 2007) in their studies were adopted to measure the success of the VLE system. This study showed that D&M 2003 model is quite sufficient in measuring the success of the VLE in the educational institutions, but in this study, Pedagogy used by teachers was not studied at all.

Chatterjee et al. (2009) replaced information quality with content quality (or nature of work); arguing that the characteristics of healthcare work, such as time pressure and task complexity, also play an important role. Other modifications involved investigating net benefits. Lin H.F., (2008) suggested member loyalty as a net benefit, claiming that loyalty was a more appropriate indicator of virtual community effectiveness. In this study, information quality and system quality were found to affect satisfaction, which in turn determined loyalty. Wang Y.S., (2008), perceived value and intention to continue using were treated as net benefits. Floropoulos, Spathis, Halvatzis, and Tsiouridou examined perceived usefulness as a benefit of using information systems, claiming that "if a system is used, it must be useful, and therefore successful." Halawi et al. (2007) replaced information quality and net benefits with knowledge quality and success when assessing the success of knowledge management systems.

Taoting, (2010) in his study mainly focused on investigating the impacts of three types of quality viz. information, system and service quality of banking app on perceived innovativeness, satisfaction and intention of continuing usage by applying the DeLone and McLean IS Success Model. In this study multidimensional structure of system and information quality was built to check their relationship with satisfaction. It was found in this study that user interface, security and response time plays a significant role in defining the quality of the system; completeness and understandability are the main contributors of information quality. System quality established perceived innovativeness and information quality provides satisfaction and both the perceived innovativeness and satisfaction directly or indirectly leads to intention to continuing the usage of the banking app.

Masoner, Lang, & Melcher, (2011) stated that there information quality, perceived usefulness, system quality and user satisfaction as main factors that define the success of any information

system (IS). Among all these variables information quality is the main independent variable and the user satisfaction as dependant variable that affect the success of any information system.

Urbach & Müller, (2011) in their book provided an overview regarding the state of research in Information system success and on the various models of IS success. In this book it is stated that Delone and Mc lean's model is one of the best models in IS success research history. It had accounted almost all the factors and variables that have been stated in various researches conducted earlier in this field. This study found that this is the single article that is most often cited in the IS literature. The updated research on D& M model is more accurate and powerful than the previous model and its usage in various studies had provided a basis of empirical support for this model. As in case of present arena where the scope of services and technology is increasing, it is felt that D&M model will be used further, and its extension is possible.

Tate, Sedera, Mclean, & Jones, (2011) presented a panel report of the PACIS conference on information success and it was found that service is also one of the important component for the success of information system success that was not initially included in the original D&M model of IS success, but later on it was felt by various researchers that it is also an essential component, so a model should study service quality as well while measuring success of Information Sistem. It was found in this report that updated D&M model is one of the parsimonious model that occupies all the dimensions of IS success.

Budiwati & Kurniasih, (2014) mainly focused on finding the factors that mainly affect the success of the mobile banking app of selected Indonesian banks viz. Permata bank Surakarta with the help of Delone and McLean Information Success model. Various statistical tools were used to measure the success of the banking application- such as Structural Equation Modeling (SEM), Chi square, Cronbach's Alpha and regression analysis. In this study the old version of D & M model was used, system quality consisted components ease-of-use, preferences, security and response time, and relevance, accuracy, information diversity and completeness were taken as the components of information quality. it was found that System quality variables had no impact on use but had impact toward user satisfaction (needs, efficiency, effectiveness and enjoyment); information quality had an impact on both use and user satisfaction; It was also found in this study that user satisfaction and net benefits do not affect use. This study stated that it's not the use but the user satisfaction that mainly affect the net benefits in terms of total benefit minus the cost to get the benefit, efficiency, performance quality and knowledge development of the customers. So, it was concluded that D&M model is not apt for measuring the success of the mobile banking app.

Nguyen, Nguyen, & Cao, (2015) in their paper mainly analysed all the researches done on IS success from 1992 to 2015 with a multidimensional approach. It was found in this study that many studies have used original D&M model but almost all the studies used updated D&M model and found that this is the one model that mainly occupies all the dimensions established by various researchers for the success of IS system. It was seen in this study that in almost all the studies done previously success is mainly represented via individual benefits.

Noh & Lee, (2016) has mainly focused on the intentions of the mobile banking users toward the acceptance of mobile banking app. This study focused on the factors that mainly affect the intentions of the users to continue the usage of mobile banking app with the help of using information system success and modified technology acceptance model. In this study, main emphasis was given to information quality, service quality, intention to use and trust. Attempts were made to establish the relationship among them. This study established that attitude of the customers toward banking application information and service quality, significantly affect consumer's intention to use mobile banking application. It was stated in this study that service quality played major role and both the models viz. Information System (IS) success model and technology acceptance model (TAM) were able to explain the behaviour of the consumer in this study.

Tam & Oliveira, (2016) suggested a model to find out the impact of mobile banking on individual performance of individuals by combining D&M model and TTF (Task Technology Fit) models. This study stated that system quality, information quality and system quality all are having positive impact on user satisfaction: system quality, information quality and TTF affect use of mobile banking. Task characteristics, technology characteristics, system quality and information quality positively impact TTF of mobile banking and it was also found in this study that use of mobile banking and user satisfaction have positive impact on individual performance, moreover moderating effects of TTF also impact individual performance of the users. This study stated that for any mobile manager to retain their customers to mobile banking; it is important that they focus on system quality, information quality and Task Technology Fit (TTF) of the system.

Hossain M. A., (2016) in this study used the Information System (IS) success model to measure the success of Mobile –Health application. It was found in this study that intention to continue the system depends upon the perceived value of the system and user satisfaction and positive perceived values are having positive significant impact on user satisfaction.

CONCLUSION

There are many studies that have been conducted in the area of mobile app usage; many studies are there to find out the quality and dimensions of the e- service quality and in terms of Mobile Applications in India. Use of Mobile Banking occupies great place in the emerging era.

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